



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

ASAP

RBT18582
Job Sheet 184702



Part No: RBT18582

Job Qty: 4 ea 10 SB

Part Name: Tail Rotor Gear Box Torque Adapter



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 10/16/18

Job Tracking No:

Due Date: 10/30/18

Created By: Logan David

Type: SOLD

Description:

Note: DWG RBT18582 Rev1 IPP Rev A 17.11.28 New issue DP Verify DD

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	4 Ea		10/30/18	0.00	0.00	Start Up Small Fab-4		MLL
95	HandFinish	4 pcs		10/30/18	0.00	0.40	HandFinish7		BEB 18-11-14.
100	Small Fab	4 pcs		10/30/18	0.00	0.80	Small Fab-9		DYC 18-11-27
110	QC	4 pcs		10/30/18	0.00	0.00	QC5		PL
120	Large Fab	4 pcs		10/30/18	0.00	2.00	Large Fab 1		DYC 18-11-27
140	QC	4 pcs		10/30/18	0.00	0.00	QC9		EL
180	Outsource	4 pcs		10/30/18			GRO002-VC	5	DEC 18-11-30
190	Packaging	4 pcs		10/30/18	0.00	0.00	Packaging2		DEC 05 2018
200	QC	4 pcs		10/30/18	0.00	0.00	QC6		DEC 06 2018
210	Packaging	4 pcs		10/30/18	0.00	0.00	Packaging3-1		DEC 06 2018
220	QC21-FG	4 Ea		10/30/18	0.00	0.00	QC21		DEC 10 2018

Part Op 95 - Bead blast remove all chrome

Descriptions: 100 - 1-HEAT and form wrench as per DWG using press. 2-Cut off excess wrench and finish end as per DWG.

120 - 1-Weld socket as per DWG note 1 2-Clean up welds using wire wheel

180 - Issue P/O to Groupe Altech: P/O 041909 - Zinc plate, ASTM B633 TYPE 1 SC2 -Certificate of Conformity is required

210 - Bag and tag

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
84504158	Wrench	4 Ea (1 ea)	90-Start up Operation	5127089
RBT18582-5	Socket, Modified	4 Ea (1 ea)	120-Large Fab	5122917(9)
				5031136 C1)

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
90-Start up Operation	84504158	4	7	0
120-Large Fab	RBT18582-5	4	1	0

Part Specifications

Specifications could not be found.

Plex 10/16/18 9:36 AM dart.logan.david



Container No: S127480



Part: RBT18582

Job No: 184702

Serial No/Batch: S127480

Revision: 1

Inspector:

Exp Date:

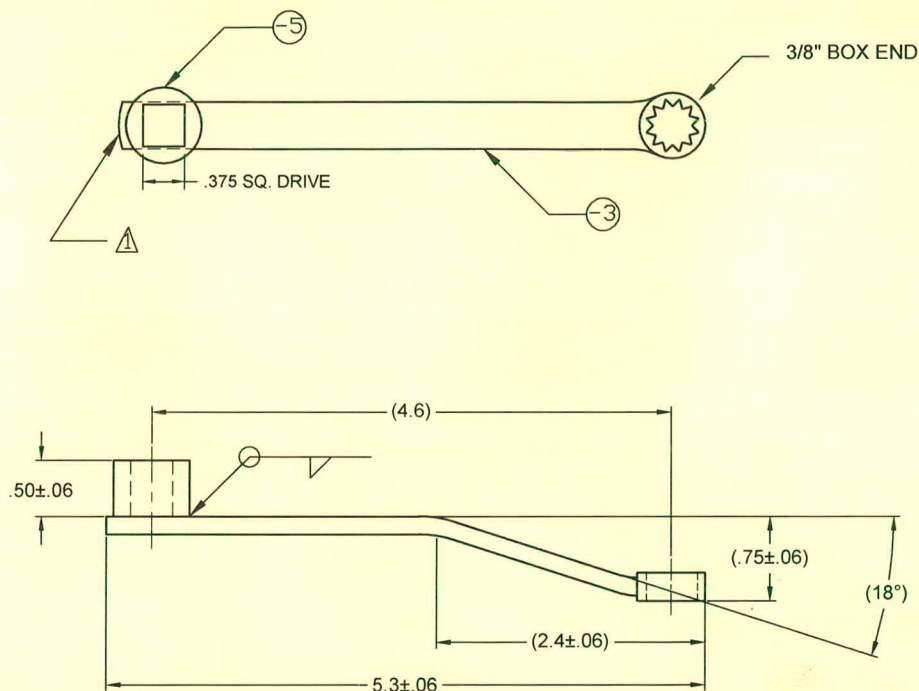
Instructions:

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
CANADA
TEL.: 1 613 632-5200
Email: sales@dartaero.com
www.dartaerospace.com

Date: 11/13/10

This drawing, specifications, and concepts contained here in are the sole property of Red Barn Machine, and may not be reproduced or used in any fashion without the prior written permission of Red Barn Machine.

REVISIONS				
REV	DESCRIPTION	DATE	INITIAL	APPROVED
A	CH'D REF. DIM FROM 5.75 TO 4.5, ADDED REF. DIM. 2.4 & 18" PER R.W.	11/28/11	RJC	RW
1	ADDED TOLERANCE $\pm .06$ TO .50, 5.3, 2.4 & .75 DIMS, CH'D OVERALL LENGTH FROM 5.2 & LENGTH BETWEEN CENTER OF WRENCH AND SOCKET FROM 4.5, CH'D TOOL NAME FROM WRENCH PER D.W.	3/14/12	RJC	DW



△ BELOW INFORMATION FOR OUTSIDE OPERATION

1. FORM WRENCH
2. WELD SOCKET TO REF. LENGTH
3. CUT EXCESS WRENCH & FINISH END

NOTE:

1. REMOVE WELD MARKS WITH WIRE WHEEL.
2. TOOL ALSO SOLD W/KIT RBT18561.

ASSY QTY	ASSY QTY	B/O	PART #	UNIT QTY	DESCRIPTION	MATERIAL	B/O INFORMATION OR SPECIFICATIONS
	1		-1	1	WELDMENT		
	1		-3		WRENCH	3/8" 12pt. BOX END PROTO #212ASD (MSC #84504158)	
	1		-5		SOCKET	3/8" DR. 9MM PROTO #5209M (MSC #70548573)	
ASSY #							

RED BARN MACHINE	
TITLE T/R G/B TORQUE ADAPTER	
DWG NO. RBT18582	REV 1
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	
TOLERANCES ON: DECIMALS .XXX ± .005 .XX ± .01 .X ± .1	
FRACTIONS ± 1/32 ANGLES ± 5°	
UNLESS OTHERWISE SPECIFIED 1. BREAK ALL SHARP EDGES .015 x 45° PR .015 R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
SCALE NTS	DATE 7-17-09
SHEET 1 of 1	

DRAWN BY: CLOUGH
APPROVED: *D. West*
HEAT TREAT:
FINISH SPEC: SEE NOTE
USED ON MODEL:

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION ☐ Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐ Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other		AGAINST DEPARTMENT/PROCESS																																																																															
Date :		Step #:		QTY Effective :		MRB (QSI042) Approval																																																																													
Description Work Order Deviation				Disposition		Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval																																																																													
<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th colspan="4" style="text-align: left;">Root Cause</th> <th colspan="4" style="text-align: left;">FAULT CATEGORY</th> </tr> </thead> <tbody> <tr> <td>☐ Environment</td> <td>☐ No Re-verification</td> <td>☐ Pressure/Forced</td> <td>☐ Temperature/Cure</td> <td>☐ Power Loss/Surge</td> <td>☐ Positioned Wrong</td> </tr> <tr> <td>☐ Design</td> <td>☐ Operator</td> <td>☐ Bending</td> <td>☐ Set-up</td> <td>☐ Folio/Program</td> <td>☐ Outside Dimensions</td> </tr> <tr> <td>☐ Doc/Data</td> <td>☐ Offset/Setup</td> <td>☐ Centre Not Concentric</td> <td>☐ BOM/Route</td> <td>☐ Grain</td> <td>☐ Over/Under tolerance</td> </tr> <tr> <td>☐ Equip/Tooling</td> <td>☐ Supplier</td> <td>☐ Cracks</td> <td>☐ Broken/Damage/Defect</td> <td>☐ Weld</td> <td>☐ Part Incorrect</td> </tr> <tr> <td>☐ Handling/Pre</td> <td>☐ Training</td> <td>☐ Crimp/Kink/Ripple/Wave</td> <td>☐ Inspection Incomplete/Unqualified</td> <td>☐ Wrong Stock Pulled</td> <td>☐ Part Lost/Missing</td> </tr> <tr> <td>☐ Material</td> <td>☐ Use for Testing</td> <td>☐ Cuffs</td> <td>☐ Contamination</td> <td>☐ Out of Sequence</td> <td>☐ Part Moved</td> </tr> <tr> <td>☐ Internal Transport</td> <td>☐ Poor Information</td> <td>☐ Crushing</td> <td>☐ Countersink</td> <td>☐ Off-set</td> <td>☐ Drawing</td> </tr> <tr> <td>☐ Tribal Knowledge</td> <td>☐ Rushing</td> <td>☐ Heat Treat</td> <td>☐ Cut Too Short</td> <td>☐ Mislabeled</td> <td>☐ Finish</td> </tr> <tr> <td>☐ LOA</td> <td>☐ Product Improvement</td> <td>☐ Wave/Twist in Tube</td> <td>☐ Instructions Incomplete/Unclear</td> <td>☐ Fit/Function</td> <td>☐ Misread</td> </tr> <tr> <td>☐ Substation</td> <td>☐ Process Improvement</td> <td>☐ Marks/Chatter</td> <td>☐ Drill Holes</td> <td>☐ Misaligned/off center</td> <td>☐ Turning Sequence</td> </tr> <tr> <td>☐ Past Expiry Date</td> <td>☐ Manufacturing Process</td> <td colspan="4" rowspan="2" style="vertical-align: top;"> OTHER : _____ </td> </tr> <tr> <td>☐ Misidentified</td> <td>☐ Past Due</td> </tr> </tbody> </table>								Root Cause				FAULT CATEGORY				☐ Environment	☐ No Re-verification	☐ Pressure/Forced	☐ Temperature/Cure	☐ Power Loss/Surge	☐ Positioned Wrong	☐ Design	☐ Operator	☐ Bending	☐ Set-up	☐ Folio/Program	☐ Outside Dimensions	☐ Doc/Data	☐ Offset/Setup	☐ Centre Not Concentric	☐ BOM/Route	☐ Grain	☐ Over/Under tolerance	☐ Equip/Tooling	☐ Supplier	☐ Cracks	☐ Broken/Damage/Defect	☐ Weld	☐ Part Incorrect	☐ Handling/Pre	☐ Training	☐ Crimp/Kink/Ripple/Wave	☐ Inspection Incomplete/Unqualified	☐ Wrong Stock Pulled	☐ Part Lost/Missing	☐ Material	☐ Use for Testing	☐ Cuffs	☐ Contamination	☐ Out of Sequence	☐ Part Moved	☐ Internal Transport	☐ Poor Information	☐ Crushing	☐ Countersink	☐ Off-set	☐ Drawing	☐ Tribal Knowledge	☐ Rushing	☐ Heat Treat	☐ Cut Too Short	☐ Mislabeled	☐ Finish	☐ LOA	☐ Product Improvement	☐ Wave/Twist in Tube	☐ Instructions Incomplete/Unclear	☐ Fit/Function	☐ Misread	☐ Substation	☐ Process Improvement	☐ Marks/Chatter	☐ Drill Holes	☐ Misaligned/off center	☐ Turning Sequence	☐ Past Expiry Date	☐ Manufacturing Process	OTHER : _____				☐ Misidentified	☐ Past Due
Root Cause				FAULT CATEGORY																																																																															
☐ Environment	☐ No Re-verification	☐ Pressure/Forced	☐ Temperature/Cure	☐ Power Loss/Surge	☐ Positioned Wrong																																																																														
☐ Design	☐ Operator	☐ Bending	☐ Set-up	☐ Folio/Program	☐ Outside Dimensions																																																																														
☐ Doc/Data	☐ Offset/Setup	☐ Centre Not Concentric	☐ BOM/Route	☐ Grain	☐ Over/Under tolerance																																																																														
☐ Equip/Tooling	☐ Supplier	☐ Cracks	☐ Broken/Damage/Defect	☐ Weld	☐ Part Incorrect																																																																														
☐ Handling/Pre	☐ Training	☐ Crimp/Kink/Ripple/Wave	☐ Inspection Incomplete/Unqualified	☐ Wrong Stock Pulled	☐ Part Lost/Missing																																																																														
☐ Material	☐ Use for Testing	☐ Cuffs	☐ Contamination	☐ Out of Sequence	☐ Part Moved																																																																														
☐ Internal Transport	☐ Poor Information	☐ Crushing	☐ Countersink	☐ Off-set	☐ Drawing																																																																														
☐ Tribal Knowledge	☐ Rushing	☐ Heat Treat	☐ Cut Too Short	☐ Mislabeled	☐ Finish																																																																														
☐ LOA	☐ Product Improvement	☐ Wave/Twist in Tube	☐ Instructions Incomplete/Unclear	☐ Fit/Function	☐ Misread																																																																														
☐ Substation	☐ Process Improvement	☐ Marks/Chatter	☐ Drill Holes	☐ Misaligned/off center	☐ Turning Sequence																																																																														
☐ Past Expiry Date	☐ Manufacturing Process	OTHER : _____																																																																																	
☐ Misidentified	☐ Past Due																																																																																		



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER **PO041909**

Supplier: GRO002-VC
Group Altech
2455 Halpern
St Laurent
QC
H4S 1N9 Canada
Phone: 514-335-3666
Fax: 514-335-3868

PO No: PO041909
PO Date: 11/30/18
Due Date: 12/12/18
Purchase Order
Revision:
Revision Date:
Ship-To Contact: Phone:

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

Via: Ground
Pymt Terms: Net 60
Freight Terms:
Special Comments:

Items

Line Item	Job	Part	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	184702	RBT18582	Tail Rotor Gear Box Torque Adapter -Issue P/O to Groupe Altech: P/O -Zinc plate, ASTM B633 TYPE 1 SC2 -Certificate of Conformity is required	Firmed	-	12/7/18	10 pcs	0 pcs	10 pcs	\$10.00/pcs	\$100.00
Line Item Note ** NEED MONDAY, IS IT POSSIBLE? ** Please confirm											
2	186576	RBW6205G19432-3G-7	Washer -Issue P/O to Groupe Altech: P/O -Zinc plate, ASTM B633 TYPE 2 SC2 -Color yellow -Certificate of Conformity is required	Firmed	-	12/12/18	4 pcs	0 pcs	4 pcs	\$11.356/pcs	\$45.42

100
100
100



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER **PO041909**

Items											
Line Item	Job	Part	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
3	187044	RBW6505G00831-3G-7	Swivel Plate Weldment -Issue P/O to GROUPE ALTECH: P/O -Zinc plate, ASTM B633 TYPE 2 SC2 -Color; yellow -Material type; A36 -Certificate of Conformity is required	Firmed	-	12/12/18	1 pcs	0 pcs	1 pcs	\$23.22/pcs	\$23.22
4	187024	RBW6505G00831-3G-1	Leg Assembly Weldment -Issue P/O to GROUPE ALTECH: P/O -Zinc plate, ASTM B633 TYPE 2 SC2 -Color; yellow -Material type; A36 -Certificate of Conformity is required	Firmed	-	12/12/18	1 pcs	0 pcs	1 pcs	\$11.356/pcs	\$11.36
Grand Total:										\$180.00	

Order Notes

Procurement Quality Clauses
A005 right of entry
A012 chemical and physical test report
A016 personnel qualification
A017 raw material identification (as applicable)

A022 Apical Processing
A024 process certifications
A026 certification of material conformance

A041 quality management system
A042 dart notification by supplier
A043 retension of quality documents

A048 counterfeit parts avoidance, detection, mitigation and disposition program

A049 supplier awareness

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Plex 12/3/18 8:39 AM dart.tsimiklis.chrisoula



Certificat de Conformité / Certificate of Compliance

(014964-1)

2455, Rue Halpern | Saint-Laurent | Québec | H4S 1N9
 Tel: 514-335-3666 Fax: 514-335-3868
 www.groupaltech.com

Bon de Livraison / Packing Slip

014964- 1

Livré à / Ship to

DART AEROSPACE LTD

1270 ABERDEEN STREET

HAWKESBURY, ON, K6A1K7

CANADA

Tel.: 613-632-5200 Fax.:

Client / Customer:

DART AEROSPACE LTD

1270 ABERDEEN STREET

HAWKESBURY, ON, K6A1K7

CANADA

BUYER:

Date expédition Ship date		Créé Par Generated By	Transport / No de Compte Courier / Acc. No.		Bon de commande Client Customer Purchase Order No.			
04-Dec-2018		Aman			041909 ✓			
#Ligne Line#	No. de Série / # Pièce Part Number /Line Item Details Job # / Ref #	Description pièce(s)	CATG. U/M	Comm. /Ordered	Exp/ Shipped	Qté NC/ NC Qty	Qté Scrap/	À venir / Back Order
1	RBT18582 ✓ Rev.	RBT18582 ZINC PLATE, ASTM B633 TYPE 1 SC2	ZINC CH	10	10 ✓	0	0	9 68 9.89
2	RBW6205G19432-3G-7 ✓ Rev.	RBW6205G19432-3G-7 01 -ZINC-YELLOW [ZINC YELLOW] OLD YELLOW CHROMATE, 96 hours ASTM B633 TYPE 2 SC2	ZINC CH	4	4 ✓	0	0	0

Notes Additionnelles / Additional Notes

Epaisseur réelle
Actual Thickness
Inspecteur Qualité
Quality Inspector
Réçu par
Received By

Nous certifions que les pièces énumérées ci-dessus ont été traitées en conformité avec votre commande et vos spécifications et rencontrent les exigences.
 Notre responsabilité financière et légale ne sera pas supérieure au montant de la facture issue.

We hereby certify that the parts listed above have been process in accordance with your purchase order and specifications and are in conformance with your requirements.
 Our financial and legal responsibility will not be higher than the amount of invoice.

247
03
247